DOCUMENT RESUME

ED 177 557 CS 205 161

AUTHOR D'Arcy, Pat
TITLE The Examination Years: Writing in Geography, History and Social Studies.
INSTITUTION London Univ. (England). Inst. of Education.; Schools Council, London (England).
PUB DATE 78
NOTE 54p.; For related documents, see CS 205 154-161
AVAILABLE FROM Export Department, Ward Lock Educational, 116 Baker St., London W1M 2BB, England ($10.00 plus $1.00 postage, for entire set; individual copies are not available)

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS *Composition (Literary); Foreign Countries; *Geography Instruction; *History Instruction; Learning Theories; Secondary Education; Social Studies; *Student Evaluation; *Writing Skills
IDENTIFIERS *Composition Process; England; *Writing Across the Curriculum Project (England)

ABSTRACT

This is one in a series of eight discussion pamphlets produced by the Writing Across the Curriculum Project dealing with some of the issues connected with writing in the schools and their relation to learning. This pamphlet is specifically concerned with writing in the areas of geography, history and the social studies for the "teacher as examiner." Among the topics discussed in the six chapters are the current situation; the aims and objectives of two new courses in geography and the humanities; disconnected writing; connected writing, involving students working from both first-hand and second-hand sources of information; and changes in emphasis in the kinds of writing being required. (FL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

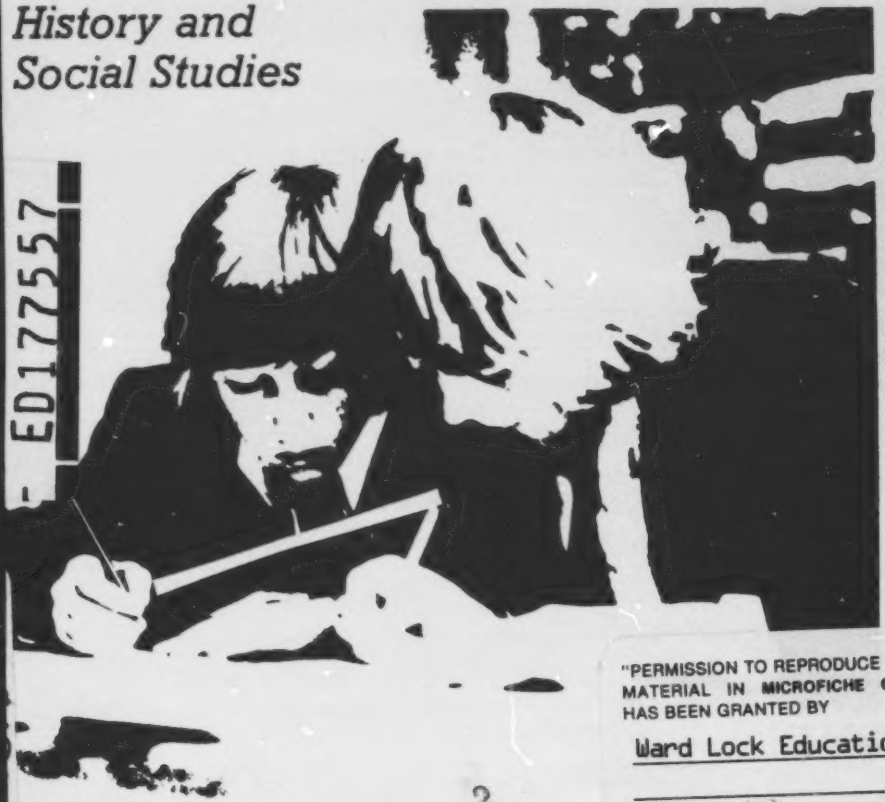
SCHOOLS COUNCIL PROJECT
WRITING ACROSS THE CURRICULUM 11-16

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

The Examination Years

Writing in Geography, History and Social Studies



ED177557

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

Ward Lock Educational

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

© Schools Council Publications 1978

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the copyright owner.

ISBN 0 7062 3652 1

First published 1978

Obtainable from:
Export Department
Ward Lock Educational
116 Baker St.
London, W1M 2BB, England.

Set in 11 on 12 point Plantin
and printed by Latimer Trend & Company Ltd, Plymouth
for Ward Lock Educational
116 Baker Street, London W1M 2BB
A member of the Pentos Group
Made in Great Britain

The Examination Years

Writing in Geography, History and Social Studies

Pat D'Arcy

Acknowledgments

The author and the Project Team would like to acknowledge their indebtedness for the materials which made this study possible to:

Mike Ferguson	Head of Geography at Withywood School, Bristol, Avon
Philip Mitchell	then Head of Humanities at Dorcan School, Swindon, Wiltshire

and to the students who produced the writing during their 'examination years'.

In the midst of all the other demands and pressures that full-time teaching makes, they made time to talk about what they were doing and to provide examples of their work.

The author is deeply grateful – and full of admiration for their efforts.

This study is of two examination courses: The Schools Council Geography 14–18 Project (as far as O-level), and the Dorcan School Mode 3 Humanities Course for CSE and O-level (in geography, history or social studies).

Contents

Chapter 1: The picture so far 5

Chapter 2: Criteria behind two new courses – aims and objectives 12

Chapter 3: Disconnected writing – students offbeam 19

Chapter 4: Connected writing – students at the centre – working from first-hand sources of information 26

Chapter 5: Connected writing – students at the centre – working from secondhand sources of information 39

Chapter 6: Changes in emphasis 48

Bibliography 52

Chapter 1: The picture so far

Readers who are already familiar with previous publications of the Writing across the Curriculum Project and the earlier work of James Britton's research team will know how the range of purposes for writing, and audiences for what is written, can narrow severely for pupils – in all subjects – as they move up the secondary school. No doubt anyone who picks up this pamphlet will recognize, from their own experience in school, how the teacher becomes an increasingly critical audience in the examination years for the writing that his pupils produce, tending to judge whatever work they hand in, in the context of 'what the examiners will want'.

What the examiners have mostly appeared to want, up to now, has been dominantly the retrieval of factual information – carefully memorized, carefully organized and frequently generalized. Most questions on any O-level or CSE papers give a clear indication of these expectations; for example:

> What is meant by the term 'hill farming'? Name three areas where hill farming is carried on. Choose one of the areas you have named and write a detailed and reasoned account of the hill farmer's year. In what ways is hill farming being encouraged and for what reasons?

Throughout this CSE geography paper the candidate is instructed to 'name', 'give examples', 'give reasons', 'give problems' (not, please note, to *discuss* any of these . . .). It is tempting to give further examples but they are not difficult to find. Look at any recent 16 + examination paper for almost any subject and the majority of the questions will be angled towards factual retrieval – sometimes single words, or short phrases, or single sentences, or short paragraphs or, at the most, a short essay.

If you have read *The Development of Writing Abilities 11-18*, you will also be aware that this narrowing of writing function to the re-collection and re-production of data for an audience whose job it is to evaluate what is reproduced chiefly for amount and accuracy, is especially character-

istic of work done in geography, history and the sciences in these later years of secondary schooling.

If this kind of evaluation was restricted solely to writing in examinations (how much do you know and how clearly can you show it?) there would be less cause for concern. But unfortunately this is not the case. Increasingly, *all* the writing that students are asked to do in their fourth and fifth years tends to be set – and marked or graded by the teacher on these very same assumptions – that it will show what students know in the generalized and classificatory style of the typical textbook:

> Although Britain's rate of economic growth during the sixties was faster than in any decade since 1900, it did not compare very favourably with that of most other industrial nations. Imports still tended to grow much faster than exports. The realisation that Britain was not paying her way in the world led to the lack of international confidence in sterling. Britain's gold reserves dwindled as they were used by the Bank of England to maintain the pound at its official level. Eventually in 1967, the Labour Government, led by Harold Wilson (Prime Minister since 1964), was forced to devalue, and the value of the pound sterling in terms of dollars was cut from $2.80 to $2.40. This drastic step, together with measures designed to make devaluation succeed, brought about a marked improvement in the balance of payments by 1969. In that year a small trading deficit was amply covered by a large surplus from invisible earnings. (*Britain's Economic and Social Development* R. N. Rundle)

The problem is that this kind of presentation can only take place when the writer has an immense amount of knowledge to look back over. Most 14–16 year olds, however bright, have simply not had the time to acquire – and certainly not the time to assimilate – enough facts in any subject to be able to generalize and classify like that for themselves. They are all still very much *learners* – only just beginning to perceive patterns emerging in the work they are doing in either the sciences or the humanities, which link this bit of data with that in ways that make for greater significance.

The kinds of thinking that learners need to do involve a great deal of collecting together, then sorting and resorting before they can hope for any really clear patterns to emerge. This means that if they are going to use writing *as a means of learning* to assist them in this gradual process of assimilation, in its early stages the writing itself will be without a clear

structure or a sense of overall organization. How can it possibly be otherwise?

As we increasingly take up an examiner role towards students in the examination years, this means that we rarely allow or encourage them to feel at ease about this disorganized part of the learning process in spite of the fact that it is often crucial if any permanent grasp of the new and the unfamiliar is to be achieved. This is especially the case with writing. Somehow, whatever our subject, we are conditioned to the expectation that all writing will be clearly organized and that if it isn't then it is 'bad' or 'a failure' or of 'a low standard'.

In the United States, 'Writing Composition' courses at senior high school level (14–18) make the further assumption that a clear *way of writing* can be taught which can then be applied to any topic successfully:

> A good writer puts words together in correct, smooth sentences, according to the rules of standard usage. He puts sentences together to make paragraphs that are clear and effective, unified and well developed. Finally, he puts paragraphs together into larger forms of writing – essays, letters, stories, research papers.

One of my chief contentions as a writer, as a learner and as a teacher, is that this *separation* of writing (or indeed any language mode) from the thinking, and consequently the learning that it should be being used for, is an illusion that makes *all three* operations – the thinking, the learning and the writing – more difficult and more elusive than they need to be.

Whenever we give students an essay for homework or ask them to write up the notes they have made in class, we put pressures on them to pretend that they know – clearly, when nine times out of ten they do not. I am sure that is why many of them are reduced to passing off other people's thinking and other people's words as if they were their own. What else can they do without revealing the muddle they are in if they dare to look inside their own heads?

Thus, there is often a sense that their minds are not really making contact with the words written on the paper – an impression that they are merely repeating what they have read or been told, without making much sense of it. There is no *personal* learning behind the words – no independent research, no observations which genuinely spring from the student's own investigations. Such words give us no inkling of the

writer's own struggle because he has not had the confidence to engage in one; instead they are a reflection of 'knowledge' which has been 'borrowed for the occasion' from some unknown writer.

The following piece, which Karen produced as one of her history essays in her fifth year at secondary school, is a good example of what I am trying to describe:

The Eastern Front

After the retreat of autumn 1915 the Russian army settled down on a new line. This ran from north to south over 500 miles from Riga on the Baltic through the Pinsk marshes to the Rumanian frontier. The line was split into three fronts. The Northermost front was commanded by Kiropatkin. The next was the West front commanded by General Evert The the South-West front commanded by General Ivanov. Major-General Aleksyseyev was responsible for the Russian operations. During the winter 1915–16 the Russian army was slowly restored to fighting condition. The deficiencies in 1915, the lack of rifles, of ammunition, of boots and properly trained soldiers, would not be repeated in 1916. The last battle of 1915 had been a minor Russian offensive in the south, aimed at helping the serbian army which had been driven into retreat when Bulgaria declared war. The Germans had a massive attack on Verdun in February. Unable to stand the prolonged barrage of gas and high explosive shells and sustaining great losses, the Russians, still singing their hymns, were driven back to their start line in one day. On the 14th of April the Tsar had presided at a meeting of the front commanders at G.H.Q. By this time the pessimistic Ivanov had been replaced by General Alexey Brusilov, who as an army commander had distinguished himself in the 1915 retreat even though he was a champion of an offensive strategy. As he left this meeting Brusilov was told by a colleague that he had been unwise to risk his reputation by offering to launch an offensive. He decided to ask all generals commanding his four armies to prepare an attack with preparations being made at four places on his 200 miles sector of the line the enemy would be unable to anticipate where the main blow would fall. For this attack there were well-built dugouts machine guns nests sniper hideouts and as many communication trenches as were needed. Before each belt there was a barbed wire barrier, twenty rows of posts to which were attached swathed of barbed wire, some of which was very thick and some electrified or mined.

While his four army commanders were each planning the details of their respective attacks, Brusilov was in touch – frequently acrimonious touch – with G.H.Q. on the question of timing. Three of Brusilov's four armies broke through at once – aided by thorough artillery preparation, surprise and the alacrity with which the Czech elements of the Austro-Hungarian army offered themselves as grateful prisoners of war. On the 18th June Everts promised attack towards Wilno did not materialise. Instead that general made a minor, ill-prepared and unsuccessful advance father south at Baranowicce. By now it was clear the GHQ would do what Brusilov had always opposed instead of attacking on the west front it would send Evert's troops to Brusilov, believing that the latter with reinforcements would be able to exploit his successfully. 17th August Rumania signed the military alliance which had been pressed upon her, and then immediately began to disprove the belief still current among the great powers fifty years later – that an ally is inevitably better than a neutral. The Rumanian opportunists did the best they could to retrive their countries fortunes they declared peace in May 1918 but rejoined the Allies on the eve of their final victory.

Notice that *superficially* the writing looks and sounds all right – it is only when you come to ask how the writer is making use of it that doubts about its value set in. Karen's major problem, which she shares with any learner drawing solely from secondary sources, is that she has no picture of her own which will help her either to perceive or to convey the significance of the events that she is trying to write about. The key figures in the operation are just names to her, the country in which the fighting takes place a shadowy no-man's land of 'lines' and 'fronts', the events no more than words read in a book and lifted more or less whole from someone else's page to her own.

This is about half of what Karen wrote down. After this, she reverted to 'The Russian Retreat 1915', prompting her teacher to ask in the margin, 'Why on earth have you gone back to 1915?' After a page or so of more generalized comment she then has another heading: 'The Russian Revolution', followed by a further page of fragmentary statements – with no attempt to link any of this up with the earlier part of her 'essay'.

All in all, the writing appears to have compounded her confusions. Her teacher, in a lengthy and thoughtful comment at the end, wrote:

I'm afraid you got rather muddled in this –

1 You must finish up with events in the right order even if you write a later section first – so 1915 before 1916.
2 It's no good picking bits out to copy, sticking them together and calling them an essay. All too often in this you jump from point to point and don't make very much sense.
3 You've obviously put a lot of work into this but you must set about it in the right way.

What is the right way, though, and how can teachers help learners to find points of entry more successfully into areas of new knowledge? If we are going to acknowledge the impossibility of leaping over all that unknown territory at a bound, then we must find ways of helping the traveller forward. What maps and compasses can we offer that will be of some use to Karen and thousands like her – what strategies that will turn textbooks into useful hunting grounds and teachers into useful guides?

To continue the image of the journey for a moment – the final examination will show, if you like, which students have succeeded in reaching their destination; it will give some indication at any rate of the distance travelled. But the talking and the reading and the writing *on the way* should be geared to helping the movement forwards, the attention fixed on the immediate terrain and the next step that needs to be taken, not continually fixed on the horizon, striving to discern distant prospects as though they were close at hand.

Over the last two years of the Writing Project, while we were looking at the uses to which writing is put in the fourth and fifth years, we heard many teachers say, 'Oh, if it weren't for the exam and being tied to a set syllabus, I would be very happy to look for ways of extending the range of writing purposes for my classes – but there just isn't time . . .'. Well, time is always a problem, but there are certainly a number of examination courses that teachers can now choose to do which deliberately encourage modes of thinking other than straight information retrieval and thus give scope over the examination years for a wider variety of writing functions also.

I have chosen to look at two such courses in some detail in the hope that a small study of two limited areas will be of some help in the mapping out of new possibilities. Above all, I wanted to study some examples of written work, produced as part of an examination syllabus requirement,

which showed that writing could continue to be used as a tool for learning and as a valuable means of making further progress. Predictably, some of the writing on both courses still seemed to be 'disconnected' from the student's own thinking, but this was not dominantly the case. I could have chosen from a good many new syllabuses, including several funded by the Schools Council: History 13–16; Integrated Studies Project; Geography for the Young School Leaver; Geography 14–18. In the end, for practical reasons, I chose Geography 14–18 because I had been in close touch with a Bristol school involved in this course. I also became very interested in a Mode 3 Humanities Course (O-level and CSE) that had been evolved by Philip Mitchell and his department at a comprehensive school in Swindon. I was able to visit both these schools on several occasions during the last year of the Project and received generous help from both.

Each of these courses set out quite explicitly in their stated aims and objectives some important shifts in emphasis away from the traditional 'feed in, fill up, feed out' approach, and in the kinds of mental activities they were trying to encourage. I quote from these in some detail in the next chapter, as they provide an important context out of which the pieces of writing emerged that we shall then study in more detail.

Chapter 2: Criteria behind two new courses – aims and objectives

1 Schools Council Geography 14–18 Project

Most of the work in this Project at the time I came across it (1974–6) had been concerned with the O-level syllabus which by then had completed its initial pilot phase and was being used more widely by schools in certain areas. The syllabus is administered by the University of Cambridge and the following quotations are taken from their booklet about the course (Subject No. 268). I have chosen these excerpts to give readers some indication of the kinds of thinking – and thereby learning – that the Project officers set out to encourage; the italics, where they occur, are mine.

'The purpose of the examination system'
The purpose of this examination is to provide an assessment system which, while maintaining standards and comparability of assessment, encourages teachers to:

(i) draw more effectively on new ideas in geography and education by the systematic and planned development of their individual resources in relation to changing curriculum needs;
(ii) relate shorter-term subject objectives more effectively to wider, longer-term educational aims, particularly by *giving scope for individual study in depth, and constructive feedback to students*;
(iii) participate more fully in sustained processes of curriculum renewal at a time when the subject matter and *potential strategies* for geography teaching are changing rapidly.

Briefly, the whole programme involves the students in a core syllabus which leads to a common final paper plus six units of coursework and one individual study.

The core syllabus
The aim of the core syllabus is to enable pupils to use important skills, ideas and models drawn on in geography to classify and interpret such everyday experiences as discovering order in landscape

and bringing regional and world problems into appropriate frames of reference.

Coursework assessment
Coursework should be particularly concerned with studies *where there are special advantages in assessing outside a common final examination,* e.g. work which is difficult to assess under time-limit conditions *because it entails persistence and initiative on the part of the student* or where a study is specific to a school's local area or a teacher's special interest and expertise.

Individual studies
(i) The study should take the form of an argument related to a clearly formulated question or problem placed in context.
(ii) The study should reveal evidence of individual work satisfying a number of aims of the course. These should entail: an understanding of the use of sources and their limitations; the interpretation of data; the application of principles; the classification of values; the communication of the results of the enquiry.
(iii) *The study should entail personal initiative and enquiry skills.* An outline of about fifty words should be added to the study and its findings. It should include a statement *indicating which parts of the work the candidate found to be most interesting.* Acknowledgment of substantial help and a bibliography should be added.

In the second half of the Cambridge Board's booklet, two of the Geography Project officers elaborate on some of these points in greater detail. There is not space here to quote them at length but with the Writing Project's particular interests in mind, here are some of their additional comments:

Coursework
Internally-assessed coursework is intended to foster curriculum development in O-level geography by providing schools with:
(a) scope and incentives to experiment with unfamiliar ideas and methods of study in depth;
(b) prompt feedback to teachers and pupils;
(c) *a periodic challenge for pupils to clarify and evaluate their thinking and grasp of ideas in order to develop their capacity to monitor work for themselves.*
Examples of coursework given in the Project's handbook show that

they . . . *focus on the pupils' capacities to explore and evaluate ideas, to develop problem-solving strategies and to form and justify practical judgments. These also require a longer time span and more individual and analytic feedback from the teacher.*

Through the emphasis on study in depth and the use of local resources, coursework should play a crucial role in preparing pupils for individual studies. The learning experiences which the coursework provides help foster the pupils' capacity to work individually; and to develop their enquiry skills in undertaking fieldwork. . . .

Internally-assessed coursework is particularly suited to these studies in O-level geography *in which more immediate and sensitive feedback is important – e.g. where it is necessary for the teacher to develop a clear understanding of the difficulties that his pupils have encountered with a piece of work.*

Two aims in teaching regional geography at O-level should be:

1 to enable pupils *to develop mental pictures* of areas and places . . .
2 to enable pupils *to think for themselves* about how the regional character of a place landscape is recognized and analysed and how this 'character' can best be summarized and communicated.

Questions on regional geography are frequently presented in forms that pupils find too difficult and which foster memorization of facts rather than reflecting thinking.

Arts and strategies of enquiry . . .

Coursework under this category should provide experience of the *selection, gathering, processing and interpretation of data* – e.g. as encountered in fieldwork or other primary sources . . .

The name given to this category *emphasizes the importance attached to developing the pupils' ability to plan, adapt and carry out an investigation . . .*

In developing the ability to carry out an investigation on his own, the pupil must learn how to adapt as well as to follow techniques and plans in the face of varying contexts and difficulties. *Thus, by 'arts of enquiry' is meant the manifold adjustments and initiatives that pupils have to take in completing a practical study.*

The difference between a coursework assessment unit and an individual study is one of length and degree of involvement. Both provide pupils with an opportunity for independent, self-directed study and for gaining experience in the arts and strategies of enquiry in geography.

Individual studies

Experience in the 1972-4 and 1973-5 examination cycles showed that pupils produced the best individual studies where:

(a) a manageable problem was defined;
(b) a hypothesis or generalization was advanced or model formulated;
(c) data was collected (by first-hand observation through fieldwork or from other sources, e.g. census returns) even if this was quite limited;
(d) data was analysed and presented (including the making of maps and diagrams and the use of statistical techniques where these were appropriate);
(e) conclusions were reached which enabled the hypothesis, generalizations or model to be evaluated.

If the wider educational aims of the individual study are to be realized the pupils must be given the opportunity for self-directed learning in which they can assume considerable responsibility for identifying problems, conducting an enquiry and presenting their findings. However, the quality of the pupils' learning will usually be improved by:

(a) the initial stimulation of a critical interest in a problem;
(b) guidance to help them become more aware of the strategies, concepts and principles, etc. which are involved.

Giving the students direct instructions or information should usually be kept to a minimum. Instead the teacher should pose questions which encourage the pupil to explore a problem more analytically by refining his concepts and clarifying his ideas, e.g. 'How did you arrive at such a conclusion?' *The opportunity to articulate his ideas to a teacher or a group of classmates in response to questioning may help a pupil to clarify his thoughts and to become more aware of his assumptions and feelings.*

The teacher's capacity to adapt his teaching style and, like the pupils, to assume a new role, is crucial to the success of the individual study.

Above all, teachers and moderators should be looking for evidence of the pupil's understanding of the enquiry process and should be prepared for this to take unorthodox forms – e.g. in the final paragraph a pupil may indicate that he now sees the initial problem differently.

There would seem to be three very important shifts in emphasis here away from the traditional expectations of examiners which could have a

far-reaching influence on the nature of the learning activities for students taking this course.

The first is the move away from sheer weight of content to the placing of a greater value on methodology: 'Above all, teachers and moderators should be looking for evidence of the pupil's understanding of the enquiry process . . .'. Closely linked with this is the recognition that the course will have a dynamic of growth and development which should be given value *as it is happening* in the ongoing coursework and in the progression from coursework to the individual study.

Most interesting of all, from the Writing Project's point of view, is the acknowledgment – more than that, the insistence – that the teacher's role will have to change if the pupils are to be encouraged to do more thinking for themselves. This chimes very closely with our own suggestion that the teacher 'as partner in a dialogue' is a more constructive audience for the active learner than the teacher as examiner/assessor/evaluator. 'Immediate and sensitive feedback' is recognized here as an important part of the learning process for teachers and pupils alike – a point that I shall come back to after I have considered some of the students' writing in more detail.

First though, let us see how far the Dorcan Humanities team reflect any of these shifts in the course which they evolved.

2 Dorcan School Humanities Programme

At Dorcan School, combined humanities (history, geography, RE and social studies) are taught to mixed-ability classes from the first year through to the end of the fifth year. In the 'examination years' there are seven humanities periods on the timetable per week and the course can lead to two GCE O-levels or two CSEs or to one of each in 'Social Science' and 'Geographical and Historical Studies'. As with the Schools Council Geography Project, the O-level final examination counts for 50 per cent of the marks, coursework (four essays for each subject) for 20 per cent and the project or individual study for 30 per cent. Readers may like to note that in the Geography Project 30 per cent of the marks were allotted for coursework and 20 per cent for the individual study. At Dorcan, the percentages for the CSE qualification were allotted slightly differently: 40 per cent for the final examination, 35 per cent for the individual study

and 25 per cent for the coursework. In order to establish this very successful dual course, leading to two possible qualifications in either GCE or CSE, the Dorcan team of teachers has been involved in many hours of discussion about their aims and objectives – and about the strategies required for achieving them. My quotations this time come from one of their departmental papers – which by now is probably somewhat out of date!

We would see the very basic aim behind the humanities section of the curriculum as to give the children the chance to make an objective assessment of the issues that face mankind today . . .

Many of the questions that we would wish to consider in the humanities area of the curriculum are not confined to the boundaries of one discipline. To make a geographical study of, say, the third world would be to treat an immensely important topic from a one-sided point of view. The topic covers aspects of history, economics, sociology and religious education as well as geography and a thorough understanding will require each discipline to make its own contribution.

The basic course objectives we would see as making an attempt to develop the student's capacity for inquiring into materials from humanities subjects. The emphasis here is on teaching and developing a skill rather than on the acquisition of knowledge for its own sake. Ultimately we would hope that when confronted with a problem, the students would have developed the skills necessary to tackle the problem . . .

Method of inquiry

1 Recognition of the problem concerned.
2 (a) Asking analytical questions in response to that problem.
  (b) Stating hypotheses.
3 Gathering data and information:
  (a) deciding what data will be needed
  (b) selecting or rejecting sources.
4 Analysing, examining and interpreting data:
  evaluate sources (determine frame of reference of the author – question of bias, etc.) and interpret data.
5 Evaluating hypotheses; in the light of the data, modifying the hypotheses if necessary and finally stating generalizations.

We are trying to develop a respect for the use of evidence when making judgments on questions within our province.

Specific aims

1 To develop a critical testing attitude to questions under investigation.
2 To develop skills in the collecting, evaluating and presenting of materials to discover the truth about the past.
3 To be cautious about the truth of generalizations and to be ready to test them by reference to factual evidence.

Although the Dorcan staff paper is considerably shorter than the Geography Project's booklet, the same concern for independent thinking and for finding strategies that will help students to gain confidence and expertise in the tackling of problems is evident. It was also evident from watching them in action and from talking to them, that they saw their role principally as an advisory one – providing resources, making suggestions and helping out when the students got into difficulties.

But now it is time to consider some of the written work that students on each course produced. There were several choices to make here – how many students should I draw from? How far should I need to distinguish between coursework and individual studies – or between writing from one course and the other?

In the end, I decided not to worry too much about any of these distinctions but to group the writing instead across these boundaries into 'disconnected' and 'connected' pieces. I also chose to draw from the work of a smallish group of students – about half a dozen from each school; where it is appropriate I will indicate which school and which part of the syllabus the writing comes from. My main concern has been to continue looking for examples of writing that seem to have been *of some use* to the writer and for all the possible reasons that might make for connection between the writer and the page rather than disconnection.

I have sometimes quoted from individual studies at some length, although it has not been possible to print any piece in its entirety. I have tried to include some fairly lengthy pieces, though, because I believe that we can only discover better ways of helping our pupils to learn, by looking carefully at what they actually *do*. I have not, unfortunately, had the time or the facilities to make a similar collection of the talking that went on, although that is very important too. One of the advantages of writing, however, is that once it's down – it is there for anyone who cares to come along and investigate it!

Chapter 3: Disconnected writing – students off beam

Almost any piece of writing by a pupil can be interesting and informative if it is considered analytically, in terms not so much of what the pupil has successfully learnt, as what we can learn from it. The trouble with an evaluative approach to school writing is that it is often dominated by a picture in the teacher's mind of a 'good' answer. Hence the mounting sense of irritation and despair familiar to us all when we discover that many pupils have failed to approximate very closely to our hopeful expectations. 'And I thought I'd put it so clearly!' as a teacher said ruefully on one occasion.

What we really need to do when we tackle a pile of coursework is to remind ourselves that the journey towards understanding is bound to take time and that the group, as on any journey, will have strung itself out along the way. Our chief task is to analyse, if we can, the nature of the misunderstandings that are revealed in the writing, so that we can respond with some constructive suggestions about the next steps the student needs to take; in other words, a teacher as a partner in an ongoing dialogue in preference to the role of teacher-as-examiner. In this chapter, I want to look at the signals that the writing can give us that will make *our* picture of the student's problems a little less blurred. In that sense every piece of writing that we ask our pupils to do is potentially a new learning situation for us as well as for them.

Take this piece of coursework, for instance, that Richard produced in his fourth year, on the Geography 14–18 syllabus. He has been asked to 'Describe the differences you would observe in the landscape if you were to travel along the two stretches of road for which you have calculated gradients.' This is what he wrote:

(a) We started off from the ship inn heading towards hawins bridge, on the left there is an unfinished road and also there is a farm called poppylat farm, further up the road there is some small buildings and a small forest on the left, then we go under a railway bridge, for a while it is just a road then we come to another unfinished road

joining from the left and also some more small buildings. A couple of farms and a footpath is all to be seen till we reach hawin bridge.

(b) As we leave Heath farm there is nothing but open land till we reach a unfenced lane which reach a 90 degree, and also on the left there is a old forest, futher along the road there is a small section of reeds (right hand) and on the left a little along there is two roads joining from the left and a small amount of villages, small lanes and wells are to be seen on the left plus a unfenced wood. There is a farm on the left called cross farm, now we enter the town with roads joining from both sides and there are a lot of hoses and different buildings. We are now at the church.

The most obvious indication of disconnection in this piece is the disintegration of the language itself. Richard would never *say*, 'As we leave Heath farm there is nothing but open land till we reach a unfenced lane which reach a 90 degree . . .', so why does he write it? Part of the answer could be that because he is struggling to attend to the map symbols and the job of fitting them together into a picture, he can not at the same time attend to the language patterns or to what his description sounds like.

Another problem is that he is not familiar with this part of the Fens in reality and is having to rely solely on his interpretation of the map to gain a mental picture of the landscape. Ultimately, of course, the ability to convert symbols into coherent images when faced with an unfamiliar map is just what the teacher is aiming for – Richard's writing indicates that he is still in the early stages of being able to do this; he laboriously builds his picture of each section bit by bit, too slowly to be able to answer the question as it is framed and 'describe the differences' between each landscape as it is represented in the two sections of the map.

Recognizing the problem that Richard is still having in synthesizing the information on the map, what suggestions could the teacher make that might help? One possibility would be to take sections from a map which represents an area the boy is already familiar with so that he can translate one kind of picture more readily into another. Here is a brief excerpt from another student's individual study in which his verbal interpretation of a map that he has drawn is clearly helped by a first-hand knowledge of each area:

From the map on the previous page, several similarities can be seen

between the two towns. Both are just below scarp slopes. Swindon is north of the scarp slope of the Wiltshire Downs and Cheltenham is just at the bottom of the Cotswold Hills scarp slope. Being at the bottom of these slopes, both towns are on spring lines. The Spa at Cheltenham led eventually to the town's fame and growth . . . Both towns are now served by motorways; the M5 at Cheltenham and the M4 at Swindon. The communications for each town are very good.

Here the writing is clear because the writer's picture is clear; and the picture is clear because he has several sources of information on which to draw – some primary sources, some secondary.

Wherever the sources for information are limited, the learner is going to have more problems in being able to reach an understanding for himself – and where they are limited to secondary sources only, examples of disconnected writing are most frequent.

I did not find a single example of seriously disconnected writing from either course where the topic involved mostly first-hand observation. Wherever the student was genuinely at the centre of the learning, literally able to look about him and take note of what he saw and heard, he had no insuperable problems about *using* that data and thinking about it in a variety of ways that made sense.

In this next piece on water balance, it sounds at first as though Jeanette has actually been to both rivers to make these observations about similarities and differences, but the writing soon signals to the reader that her mental picture is confused almost as much as in a previous piece about the River Amazon!

A comparison of the Rainfall and Run off of two Rivers
If you go to Somerset in the West of England then you will see the river Chew. At Compton Dando we measured this river and we found a large rainfall due to the rainshadow. The water runs over clay, an impermeable rock.

In East Anglia you will find the River Brett, we also measured this one, at a point in Hadleigh Mill. This river runs over a porous rock, chalk – this type of rock contains tiny pockets of air.

The East England area is lower than the west side and it therefore has a rain shadow, consequently the west receives the majority of the rain.

It can be seen from the bar graph that a lot of rain falls on the river Chew. Because most of the winds are south-westerly they are generally wet winds with a lot of rain. Except for one month in a year there is more rainfall than run-off because a lot of the water is stored in the Chew Valley lake and then evapotranspirised. In February the extra water (shown on the graph) must have come from the lake.

With the River Brett the rainfall always exceeds the run-off, the run-off being a lot lower than the Chew. One reason for this is because water is nearer to the surface, and there are less clouds causing more evapotranspiration and also because the chalk underground stores water. The east doesn't get so much precipitation because the rain shadow, once again, falls on the east causing more rain fall on the west.

The teacher will be able to see from this that Jeanette is aware of some of the information about rainfall and run-off, though not yet sufficiently to present a completely coherent picture. The relationship between the two is quite complicated, especially as it varies according to different geographical features from one area to another. As a learner about water balance myself, I found it impossible to understand much of the accompanying information sheets. Take this paragraph, for instance:

> The measurements are in millimetres because streamflow is normally measured in cubic metres per second. In this example 50 mm more rainfall fell on the basin than left. This 50 mm of rainfall is now stored in the basin temporarily, implying that the basin was fairly dry at the beginning of the year but was fairly wet at the end. The 50 mm stored will enter the stream or will be removed by evapotranspiration during the following year. Next year it might be
> rainfall = streamflow + evapotranspiration
> 1000 mm = 500 mm + 550 mm
> showing that 50 mm came from storage sources.

I want to suggest that it could help pupils to make better use of writing *in the process of learning* if they were encouraged more often to ask questions about points they did not understand (please explain more fully the connection between millimetres and cubic metres; what would 50 mm of rainfall look like 'stored in a basin' – I can't picture it, it sounds very small). If they are hurried along too quickly into writing 'answers' as if their understanding were complete, their mistakes will be revealed

unintentionally as Jeanette's are here. Surely it would be both more honest and more satisfactory to use the writing for this very purpose – to try and pinpoint problems and confusions. That way the uneasy feeling that pupils have when they hand their work in – that their writing is going to catch them out – will be dispelled; by focusing on the learning problems, they may even have arrived at a clearer picture anyway. At the very least they will have provided the teacher with a better chance of helping them to work out the next move.

The other two disconnected pieces of writing that I have chosen reveal a common problem, although at first sight one looks more coherent than the other. In effect though, both writers are simply collecting data without having anything to *do* with it; the result is a series of statements collected from books and notebooks which don't hang together because no further thinking has happened once the data has been obtained. There is no attempt to analyse or interpret or speculate about the implications of any of the statements. Even the language is borrowed from elsewhere – my guess is textbooks in Alan's case and journalism in Belinda's. Alan's writing comes from a piece of coursework for the Geography Project's syllabus; Belinda's is taken from one of her individual studies for the Dorcan course.

Problems of Farming in Southern India (Alan)
In India 70% of the people are classified as 'agricultural population' and are dependent for farming. In fact not all of the land in India is not nesscessorily suitable for farming, as only about 53% is agriculturally productive while the remainder of the land (47%) is only forest or waste land. The climate is constantly changing throughout the year. The dry season varies in length lasting up to six months and he is only employed only for part of the year. The monsoon begins at different times, so seeds planted a week or two before the normal break of the monsoon, may dry up in the ground if the start is delayed. If the monsoon breaks before the seeds are planted the fields will be too wet to plough. There may be a weak monsoon when less rain falls than normal and this may not be enough to grow the crops so the yields will be low which may cause famine. The temperatures are very high so there is tremendous evaporation which can cause a loss of a lot of water. Because of the high temperatures all the year round, so the vital factor is rainfall. If there is enough rainfall the farmer could grow several crops every year.

Acheivement to Nixons credit (Belinda)

Most people say that President Nixons administration achieved a lot for America and the world in the field of foreign policy. However it acheived a lot more away from home, than it did in America herself. America still had problems at home, for example her figures for drug adicts are much higher than any where else in the world, and the race problem is still very serious.

In foreign policy there were some notable successes. For example, relations between the U.S.A. and the two communist giants China and the U.S.S.R. are probably better now than at any time since World War two.

We are now going to look at this in more detail.

His major accomplishments have been in international affairs where, with Dr. Kissinger's help he removed the blinkered communist ideology.

He was the first American to speak to communist China, which was an isolated country because of her communist beliefs. Left out on a limb, no American would have anything to do with her. Nixon was the first American President to speak to communist China. America did however benefit from this, because it was no longer hampered through lack of communication with the communist outside world. Previously America shut their eyes to China, refused to think of her existence, but Nixon made them realise that China was a strong country, was part of the world, and they now communicate with China evan though they still feel suspicious towards her communist ways. It's worth noting here just how deep is the American feeling against communism. In U.S.A. for example communism is banned. If you want to get into America and marry you have to answer several questions, e.g. if you're a communist, if you've ever been a communist, if you've ever belonged to a communist party. Nixon also persauded Mr Brezhnev, the Russian leader, to speak to, and to be more accommodating with the West, to avoid two cold fronts. There were two cold fronts because Russia was already unfriendly with China. If America became friendly with U.S.S.R. and offered to trade and communicate then this would warm one of her fronts. He also made some headway in the limitations of strategic arms or anything a country uses in warfare.

Both these excerpts have an element of almost Milliganesque inconsequentiality about them in places (an interesting example of 'disconnected thinking'), although not, I am sure, deliberately so with either of these

students. When you pile facts together like this, however, that kind of effect often occurs.

The courses that both Alan and Belinda were taking set out to encourage students to do more than this – to become involved in a process of enquiry which would involve many kinds of thinking and forms of expression and presentation. But, as we know very well, some pupils move more readily into more demanding learning situations than others. For many, by the time they are fourteen or fifteen years old, the expectation that writing in most school subjects involves above all the collection of large (albeit inert) masses of data is very deeply ingrained. As we have seen, that is often what textbooks look like – and producing what you 'know', like so many bones laid on the carpet, has often produced high marks in the past for assiduous retrievers.

In the next two chapters we shall see how some students have succeeded in breaking through the 'fact barrier' by making use of the strategies for thinking that their teachers had recommended. But slower learners – or any learner faced with the difficulty of trying to understand somebody else's picture in somebody else's words – are in particular need of that 'immediate and sensitive feedback' that the Geography Project team talked about – 'where it is necessary for the teacher to develop a clear understanding of the difficulties that his pupils have encountered with a piece of work'.

In each of the instances that I have given in this chapter, it would be possible for the teacher to use what each student has written positively – as the basis for more talk, perhaps, encouraging each writer to think some more about the information that he already has, helping each learner through discussion and questions to try out, consciously, as many different kinds of thinking as he can bring to bear on his picture so far.

Each piece has shown a writer *in the process* of learning about this topic or that, 'somewhere on the way' to deeper understanding, if only the teacher can help them to discover a way forwards. I hope that they have illustrated some of the problems (which are never simply writing problems) that will always reveal themselves, however well intentioned the course, wherever new learning is part of the programme.

Chapter 4: Connected writing – students at the centre – working from first-hand sources of information

In Chapter 3 I was looking for ways of analysing parts of the journey towards understanding where students had got stuck (or come unstuck . . .). We saw how this loss of direction was reflected in the sense of disconnection that occurred in the writing. Sometimes this was literally in the actual breakdown of the language but more often in the sense that their own thinking had ceased to be tuned in to the information with which they were trying to deal. Consequently, they did not appear to be making any further headway towards more meaningful perceptions – no processing or interpretation or analysis was going on as they wrote.

In this chapter I want to show how other students were able to undertake studies which clearly entailed 'personal initiative and enquiry skills' and which *over a period of time* not only involved 'their capacities to explore ideas' but also their ability 'to clarify and evaluate their thinking and grasp of ideas'. In other words, I now want to show how the criteria behind each course–to encourage students in the fourth and fifth years *to learn how to think and how to deploy their thinking* – really worked in a way that is reflected in their writing.

Because all the individual studies for the Geography Project that I saw were based on field studies of some kind, I have used these mainly to indicate how these students were able to draw on what they did at first-hand in the enquiries they planned. The Dorcan individual studies drew on both primary and secondary sources of information and in this chapter I refer to two based on first-hand work. Above all though, the Dorcan studies showed that students could make use of the strategies outlined in Chapter 2 for doing their own thinking about 'secondary' information in a way that kept them 'in touch' and was reflected in the coherence of the writing. Chapter 5 looks in detail at three such pieces.

I want to begin with Stephen's field study of Lulworth Cove and Stairhole. About half of it is presenting his observations non-verbally as maps and graphs and scattergrams, but where he does use writing he shows an

ability to move easily between informal and formal language which indicates the degree to which he has achieved an understanding of this particular 'place landscape'. As you will see, it would be wrong to assume that what he has learnt is based entirely on his own observations. He has learnt to interpret what he sees from what his geography teacher has told him and from geology textbooks. It is the interflow of these sources with his own observations that has resulted in the kind of learning that is likely to have some permanence for Stephen long after his fifth year at school has receded into the past.

Description of Lulworth Cove and Stairhole

The outermost rock along the coast line is a hard grey limestone called Portland limestone. It is of course a sedimentary rock formed by immense pressure on sediments such as sand and grit. It is formed under the sea and pushed to the surface by the action of the movement of the earths crust. As a result the rocks bend and form synclines and anticlines. These can be seen quite clearly at Stair hole. The next rock is also a limestone formed in the same ways as the Portland rock but this layer of Purbeck stone is not as hard probably because it was not compressed under such great pressure.

Preceeding the Purbeck layer we have Whealden Clay beds, clay is very soft and is easily attacked by erosion especially by the rain making the clay slump. This is evident at the clay cliffs at Stair hole.

There is a small layer of greensand. This is a soft rock, not as soft as clay but softer than chalk. The final layer of rock is chalk. Chalk is not one of the hardest rocks but it resists erosion well. This is proven by the flatened effect of Lulworth cove at the cliff.

Stair hole is a good example or model of coastal erosion. As you will see on the annotated diagrams the whole process of cave-arch-stack is there.

There is the sense here that Stephen regards himself by now as something of an expert. What he writes could almost stand on its own for an unknown public audience. He sounds genuinely interested in his subject and eager to communicate his knowledge about it to other readers now that he has learned how to interpret the significance of what he sees as he looks around him at the cove.

Elsewhere, his account of what they actually did is more specific and addressed more directly, perhaps, to his teacher, as one interested party to another:

The Techniques we used

Beach Transect

When doing the transect we had a team of 3 people tackling the problem. Two of these people were involved in measuring angle of change of slope. These people had to be of similar height so the reading could be as accurate as possible. The clinometer was used. One person stood on the end of the beach while the other stood on top of the first break of slope. The person at the end of the beach aimed the clinometer at the other persons head and read off the angle.

Then the team of three paced up our given piece of beach making a note of features like cobbles, wave cut platforms, man made debris etc. We then entered the results onto a transect diagram using the appropriate symbol in the key.

Pebble Survey

This was a survey to find the size of pebbles at 10 pace intervals. The survey was to show that pebbles near the sea are smaller and get larger towards the cliff. That is the theory of the survey. In practise, the results are not very conforming to the theory. To do this exercise we had to use a pair of calipers. Starting from the waters edge and took 10 paces and took 10 pebbles.

We measured them, discovered their type (flint, chalk) and wrote down the shape of them. These results are entered on the survey sheet. We then took anoth ten paces and repeated the operation.

Suggestions for improving the techniques

On the beach transect it would have been very beneficial to have an aerial view of the section of beach so we could of got a better drawing. For our measurements we used paces. It would of been more accurate to use a tape measure.

When doing the profile we used people to find the angles of the slopes and our clinometer were only plastic and very basic and not terribly accurate. More sophisticated instruments would not have gone amiss and would have been most helpfull.

When doing the pebble survey our caliper was only plastic and was not very accurate. A micrometer or vernier caliper would have been more accurate but more difficult to use. I also suggest that five paces should have been taken each time and 20 pebbles sampled this would have shown a better result.

I don't know whether the teacher asked the group to include suggestions

for improving any techniques they used in their study as part of their account when they came to look back over what they had done. The strategy certainly works for Stephen; it helps him to think critically about what he did and to consider seriously how 'to adapt as well as to follow techniques and plans . . .'. His writing is closer to colloquial speech in this section, possibly because in effect he is conducting a conversation with his teacher in his mind as he writes. Also his attention is very much on what they did and thinking about how to improve it another time.

Jeanette chose to centre her study on two local shopping areas near her school. Basically, what she set out to do sounded simple: 'To find out how different one shopping area was from the other'. In practice, however, she kept coming up against snags and uncertainties which are all recorded honestly in her account.

Now that she is writing about her own survey, Jeanette seems to have more confidence in tackling the data than she did in her response to the information about water balance which was provided by the teacher. The writing flows more easily because the picture that she is drawing from in her mind is fuller, formed as it is from activities that she has both planned and conducted over the preceding weeks. Here are some excerpts from her study.

Introduction

The aim of this study was to try to find out how different one shopping area was to another, in regards to the goods sold there. (The two areas concerned were Queen's Road, Withywood and Syme's Avenue, Hartcliffe.)

One thing which had to be taken into account during this study was the factor that Syme's Ave. is a definitely larger shopping area than Queen's Rd., but Queen's does have two other shopping areas nearby, one being of a substantial size. Unlike Syme's Ave., Queen's Rd. does not have its own bank or post office but there is one of each in the two nearby shopping areas, which is why I felt these two areas were suitable for comparing. Syme's Ave. has many shops but they are only repeats of others there. e.g. There are two bakeries, two chemists, two newsagents etc. Queen's Rd. does have fewer shops but I believe that it has all the basic essentials. eg. Butcher, baker, chemist and supermarket.

One way in which I have tried to work out a comparison is by finding how large an area each shopping area serves, ie. each shopping areas umland. I have done this by asking people who were actually shopping where they live. As the addresses seemed fairly widespread I only needed about eight or ten to get a rough idea of any conclusions. . . .

The smallness of her sample is in fact one of Jeanette's first mistakes, as she discovers when she tries to reach some conclusions about her data later on. Here are some of the other problems that she came up against during the course of her study.

One part of the survey consisted of a comparison of the number of people who frequent two different types of shops in Syme's Ave. and Queen's Rd. The two shops concerned were (1) Kiosk (Newspapers, sweets etc.) and Parkers' Bakery. These two seemed to be suitable because they are both used daily by shoppers.

From the table of results that Jeanette drew up it is clear that there was one of each of these shops in each shopping area. She describes what she did as follows:

I compared numbers by spending equal amounts of time recording the numbers of customers entering the shops. I did four different counts for each shop trying to keep to approximately the same times for both areas to avoid unnecessary inconsistent results, ie. I might take a count in a rush-hour period in Syme's Ave. and in an off-peak period in Queen's Rd.

In spite of this planning, however, Jeanette's results turn out to be inconclusive as no very clear pattern emerges – in itself a useful lesson for any would-be researcher to learn!

Observations made about the table

The Kiosk results only seem to make one conclusion, that there is no definite pattern. With the first count Syme's Ave. obviously receives the larger number of customers but the other three times show a fairly equal amount to both shops, the numbers only being five and below different.

The Parkers' Bakery results are also difficult to collect conclusions from. The bakery in Queen's Rd. receives just a few more customers

each time exept for the final count where Syme's Ave. receives four more.

The only conclusions that we can obtain is that an approx. equal number of people frequent both areas.

In the next section of her survey Jeanette tries 'to find out the difference between goods – types and prices in both areas'. Again her first attempt draws a blank when she writes to the supermarket in each shopping area 'asking for any information available about sales' – and receives a reply from neither. Next she makes up a questionnaire 'to ask shoppers their views' and although yet again no distinctive pattern emerges between the two areas this is the part of her investigation that Jeanette enjoys most: 'The third part was the most interesting and it was also the most helpful because you could use the questions to obtain all the information needed.' Again her chief mistake, ironically, was not asking enough people for their views:

> From the results of Queen's Rd. shoppers there is an obvious feeling that Withywood is the shopping area for fairer prices and better service. However the only pattern I can get from results of Syme's Ave. is that the few shoppers asked could not on the whole, see any obvious differences between the two areas, therefore it is difficult to draw any true conclusions . . .

One of the aims of the Geography Project, you may recall, was to encourage pupils to think more analytically about their surroundings; both Stephen and Jeanette have shown from their individual studies that they can handle data in this way. In another study that he made (is Withywood a well-planned housing estate?) Stephen comments bluntly in his summing up:

> The study did not teach me anything I did not already know. It just taught me to analyse everyday things in Withywood. I did not enjoy doing the work, I only did it as a matter of necessity. It did however condition me to analyse and 'open my eyes' to my surroundings.

Perhaps if we were able to end up with more students in the fifth year persisting with a piece of work even when the going was a bit of a drag and realizing when they had finished that at least it had made them more aware, my own feeling is that we should not be doing too badly!

The other individual study from Withywood School that I have chosen for this chapter is particularly interesting because it shows the writer changing her mind about possible conclusions right at the end of her written account. I am sure that the act of writing it all up helped to make the picture clearer *as she went along* so it is a good illustration of an understanding actually being arrived at while work is in progress.

Linda has chosen to take three models of urban development: the concentric ring model, the sector model and the multiple nuclei model, and 'to see whether a road leading from the centre of Bristol to Hartcliffe agrees with one of the three forms of urban development'. She provides clear diagrams which illustrate the basic patterns of each model clearly.

However, because an earlier transect carried out by the whole group demonstrated the concentric ring model, at a very early stage in her own study Linda is inclined to look for a similar pattern:

> Because of this knowledge I think that these studies might develop into a somewhat similar plan and be in a concentric ring form to match Speedwell Road.

Linda then produces a series of careful drawings illustrating the different types of housing that she has observed, but when she comes to write about what she saw and to interpret its significance, her focus appears to be directed more towards her original notes on the concentric ring model than towards what she observed in her own transect. I think we can see this happening in this excerpt subheaded 'Twilight Zone':

> *Twilight Zone*
> This means that the area has come to the end of a useful life. The houses are quite old (being built late 19thc. early 20thc.) and very small, with no gardens or modern conveniences. Everything in this area is usually sub-standard and often waiting demolition. It would cost too much money to repair all the housing. The houses were originally built to take in factory workers. They were built close together, small and cheaply and are still terrible standards of living. A recent survey estimated that 3,500,000 houses were unsuitable for human habitation, although people still live in some of them. People who could afford to take care of the houses here tend to live as far as possible from the city centre, usually in the suburbs.
> The twilight zone is found just outside the central core and is

often referred to as the 're-placement zone'. When houses here are demolished a place has got to be found for the residents to live. On some of the cleared ground high-rise flats are built, but these cause a lot of problems, especially for parents of young children and old people who cannot get about.

Sometimes people are re-housed on the outskirts of the city in modern houses or flats in the suburbs. Population gets so big that there is not enough room inside the city any more.

Old houses and new flats are not the only things found in the twilight zone. Old industries are also here and are no longer working which means that they add to the deteriorating value of the land. Some derelict or unwanted property actually collapses.

All the signs here suggest that Linda has reverted at this point to quoting from notes that she made earlier in the course. The writing *looks* connected but really it is disconnected because she has temporarily 'switched off' her own thinking and is inserting instead information that she wrote down in the teacher's words earlier in the year. The statements that she is making are too general to apply specifically to her own transect. They could be about *any* twilight zone area, and my bet is that Linda is using them here as 'filling-in' material, and not because she has her eye on her own particular study.

Linda begins to think for herself again when she comes to her 'Conclusions' and it is her expression of uncertainty at this point which indicates in a very positive sense the possibilities for further learning.

Conclusions

The transect taken from the centre of Bristol to Hartcliffe agrees with the concentric form of urban development although in some places it doesn't seem to fit. Another road – Speedwell Road leading from the centre of Bristol to Kingswood agrees with the concentric form of urban development.

A wider look at Bristol might show that on the whole the concentric ring theory fits Bristol, but it might show the sector model theory. From the beginning of Feeder Road to Brislington and surrounding area it shows the sector model theory. The main characterisic of this area is industry and little or no housing. This study also shows that unless a wider look is taken of the area surrounding a transect and the transect shows the concentric ring theory, this

theory cannot be very accurate as other parts of Bristol, eg. Feeder Road may show signs of another urban development.

This is not a very lengthy comment, but all the same it is perhaps the most important section of Linda's whole paper because it shows her *taking the next step* in her learning about concepts of urban development. She is beginning now, to relate what she has observed for herself about the city she lives in to the information that her teacher has given her – and it '*does not seem to fit*', not neatly and exactly anyway, so she is having to reconsider. If this paper can be regarded as part of a process and *assessed* as part of a process, then we can see how it has value for both pupil and teacher. Linda has spiralled round to a new starting-point which is an indication of real learning. Her individual study is to be valued for that reason, as the Cambridge Board's booklet made clear: 'Above all, teachers and moderators should be looking for evidence of the pupil's understanding of the enquiry process and should be prepared for this to take unorthodox forms – e.g. in the final paragraph a pupil may indicate that he sees the initial problem differently.'

As a contrast to this move towards more openness and a recognition that Linda's earlier assumptions might have been wrong, here very briefly are a couple of quotations from the beginning and the end of another Withywood study which show the writer doing the *opposite* of what he intends to do and keeping a closed mind in spite of the evidence that he has considered.

> Should Historically Interesting Buildings in Bristol be Preserved? Since 1975 is Architectural Heritage Year, I thought it appropriate to attempt a study on historic buildings. The main aim of this Study is to decide whether or not it is wise for our society to preserve buildings of historic interest. In doing the Study I had to dismiss any feelings I had on the subject and attempt it with a clear mind.

Paul had hoped to find the answer to his question chiefly from books, but he was 'surprised and disappointed at the lack of literature'. In the end he reports, 'I got most of my information from a person in the planning department in Cabot House' and from a 'public interview with people in the street' – the majority of whom, as his pie chart shows, were strongly in favour of preservation. So was one of the books which he does in fact refer to: *The Rape of Britain* by Cruikshank and Amery:

The Co-op Warehouse and others nearby were described by the two authors as probably the finest endangered buildings in the city. – That was reckless destruction.

The person in the planning department points out, however, 'the enormous cost of preserving buildings: there is no profit yet an awful lot of money is "lost" in the upkeep.'

This financial aspect of the problem predisposes Paul in his conclusion to take a strongly-antipreservationist stand, in spite of all the 'evidence' that he has earlier reported on in support of preservation:

Conclusion

It is hard to conclude on such a study which has so much for and against it. In my opinion this argument will probably never be solved.

So in conclusion I feel, despite the highly conclusive evidence obtained in my public interview and the very strong Co-op Warehouse case, that if I were in a position to do so I would not allow the preservation of the historically interesting buildings. I may be leanient with our very finest examples of historic architecture but in the majority of cases which I feel are being preserved largely on sentiment I would not preserve. Here are my reasons:

1 Money. Money is a little word which is rarely abundant at the best of times. Money spent on preserving things that do not yield profit is money lost. It has to be said it is not wise to lose money especially in times like these.

2 Historic buildings may hinder progress. I do not feel old and modern should exist side by side for the simple reason they do not look right.

Also if we are to advance and become more modern then more modern buildings must be built to accomadate the predictable demands of an expanding society. Old buildings must make way for this.

I strongly suspect that these were Paul's 'feelings' before he ever began his study, and that the points made by the Council official chimed in with views that he already held. His reading and public interviewing seem to have had little effect, although they may have made him more aware that there are two sides to the argument.

In most cases, though, students who had based their individual studies

on their own observations recorded in their writing or in discussion how the consideration of what they had done often led to fresh insights.

Adrian from Dorcan commented how his study led him to discover the exact opposite of what he had thought he would find: 'Well, I disproved the title (A Comparison between Swindon and Cheltenham) by the time I'd finished the project because I mean it's not a comparison, in fact it's a contrast because originally I thought how alike these two towns were – you know, all pleased I can do a great comparison . . . and ended up being more aware of the differences!'

Dawn's individual study for the social studies course at Dorcan was based on a series of visits to a hospital for mentally-handicapped children; it is similar to several of the Countesthorpe studies that I quoted from in another of our pamphlets, *Keeping Options Open*. It is written up very like a diary in the sense that Dawn is both recording and reconsidering what happened during her visits – a process of recollection and reflection which is fundamental to much that we learn during the course of our daily lives.

Here are just two excerpts to illustrate how written language can be a useful medium for this kind of thinking.

My third visit

This week Roger wasn't there, but another, Tony, was in his place. He explained that they worked in alternating shifts, and so all the staff on this day were new to us. We met all the new staff and then settled down with the boys to watch T.V. Some of the boys were playing with some polystyrene bricks which slotted into each other. They tried to build a tower right up to the ceiling, but no-one was tall enough. When one stood on a chair and reached up the whole lot fell on top of him.

Meanwhile one of the boys sat on Deb's lap and wet himself on her. This was an unexpected situation, but she coped very well. This was what it's really all about, coping with the problems without getting upset or angry.

Soon after this it was tea-time. This week there were a lot more boys there, so they eat in their group rooms. I was in group B with Tony and Deb went next door with A group. One of my group, Simon, was on a diet. But he didn't like any of his food and he re-

fused to eat it. When Tony was out of the room I told Simon he wouldn't be able to have any ice-cream unless he ate it before Tony was back. So he did. I don't know why he was on a special diet, he wasn't fat. Another boy, Duncan, hadn't been at B . . . long, and he didn't like it. He wouldn't eat his food either, and he said he was a criminal. There was mashed potatoes and beetroot and some of the potato was red from the beetroot. So I said, 'Oh look, you've murdered your potato! It's all covered in blood! If you don't eat it all the police will find out, and they'll take you to prison.' He thought it was really true and so he ate it all. When Tony came back they all had empty plates and I felt I'd achieved something.

Conclusion

The care of mentally handicapped people is a very difficult and demanding job. The patients must be treated as much like normal people as possible, when they are so different. A mentally handicapped person cannot be left on his own, because however well you know him, you can't predict what he might do.

Sometimes you can try very hard but get no response. This can be very dis-heartening. Sometimes when you think you're making headway something happens and you're back where you started. But when things go well it is very rewarding.

The most difficult cases seem to be those who are only slightly handicapped. When a patient is severely handicapped they more or less do what you want them to. But those who are nearest to ordinary people seem to understand that they are different. They realise that people expect them to be difficult so they are. It was these patients who were the most awkward and disobedient.

Some of the boys at W.S. don't find much love in their families. Some never went home for the weekend all the time we were there. Their families couldn't come to terms with the problems of a mentally handicapped child. These boys felt very unwanted. However much affection they get at W.S., it can't be the same as a loving family. Mental cases or not, they realise how different they are from the other boys. When it comes to Christmas and only two or three have to stay at B. what would they think? It makes me very sad to think that some families can reject their child like this. I found all the children very lovable in spite of their strange behaviour.

I can understand the parents not wanting their children all the time. Although I got on very well on my visits, I wouldn't like to

work there all week. But I think they could put themselves out for the occasional weekend. I think of what it would be like in the patient's shoes, if my family left me.

The main aims of care for the mentally handicapped are to try to prepare them as much as possible for a near normal life. Quite a lot do manage to start a new life in society and make a good job of it. But there are many cases of people spending their entire life in a home. I wish this wasn't so.

40

Chapter 5: Connected writing – students at the centre – working from secondhand sources of information

Now for some examples of individual studies from the courses at Dorcan School which were based almost entirely on information gained at secondhand – and which succeeded, nevertheless, in involving students in thinking for themselves. Much of the work that we do in school has to be based on books or films or the knowledge of teachers. These are the resources that we all rely on constantly inside the classroom; the problem is how to make them accessible to new learners in the sense that they can make their own way with any kind of confidence or sense of direction into the formidable collection of data that other people have got together. This is the problem that the Bullock Committee identified so succinctly in Chapter 4 of their report when they comment on the nature of knowledge and how it has to be reconstructed afresh every time someone who does not already know makes his approach:

> It is a confusion of everyday thought that we tend to regard 'knowledge' as something that exists independently of someone who knows. 'What is known' must in fact be brought to life afresh within every 'knower' by his own efforts. . . . Nothing has done more to confuse current educational debate than the simplistic notion that 'being told' is the polar opposite of 'finding out for oneself'. In order to accept what is offered when we are told something, we have to have somewhere to put it; and having somewhere to put it means that the framework of past knowledge and experience into which it must fit is adequate as a means of interpreting and apprehending it. Something approximating to finding out for ourselves needs therefore to take place if we are to be successfully told.

After I had read some of their projects, I discussed with a small group how they had managed this process of assimilation now they could look back over what they had done. Here are some of the comments they made:

I think it helps you in a way in that you learn to work more on your own, it's more on your own initiative – which is an advantage when you do further education or A-levels . . .

. . . when you compile a project you have to find the source of information and look it up and decide which is the right information you want and put it all in order and write it up – and there's a lot of planning goes into this . . .

I enjoyed doing a piece of work on my own separate from the class – it is a difficult thing and different and it requires a lot, but at the same time it's different in a better way, I enjoyed it more.

How do you mean in a better way?

Well you get more out of it personally from doing a good piece of work – I mean you've got to do it well and you take time over it, and although I wasn't happy with this one when I'd finished it I enjoyed trying to achieve something through it – and, em, you have to rely on yourself.

With these it was difficult because we had to choose our own subjects. I found it difficult 'cos the first one I did wasn't very good because I was stuck on what to do and I sort of just picked up a subject – I did the geography of Scotland and it wasn't very good cos I – any information . . . I mostly copied it out of books so I didn't get a very good mark. After the second one – I'd learnt from the first one what I'd done wrong, in this one I managed to work by myself a bit more . . . I had a question to answer and I was able to answer it and I did have a plan . . .

. . . you also found the limit of the materials – like – I found the books – what I was looking for was something that would help me on my particular question . . . and you had to really go a bit further than they did and that was quite useful.

I have quoted these comments from Nick, Adrian, Lorna and Sue because I think they give us some idea of how each of them tackled the problem of making sense of new information in a way that cannot always be directly revealed in the writing – the importance of the time factor, for instance, and the sense that they were being trusted by the teacher to do their own researching, which clearly involved thinking for themselves along the way.

Most of all, the strategies suggested by the team seem to have helped these students to structure their approach to a new topic constructively; it is their use of these strategies that will be most evident in their writing. The students I talked to all agreed that starting with a question or a problem was a great help when it came to sifting information from books because it provided them with a focus that 'just reading' failed to provide. It is interesting that Lorna selected this point as a reason for her second project being more effective than the first: 'I had a question to answer and I was able to answer it'. Her entire study is too long to quote in full, but here is her introduction, a summary of the 'middle' and her own conclusions to give some idea of how she has moved more to the centre of the writing than when she was 'just copying' facts about the geography of Scotland.

How has the climate affected the Bushmen's way of life?
In this project I am going to describe how the Bushmen tribes of the Kalahari Desert are affected by the climate in the Desert. How do they manage to survive in the Desert? How do they manage to survive in the hot dry climate? Have they changed at all in the past years? I would like to find out how their way of life changes when the climate changes (dry and wet seasons).

I think it is interesting to find out about the 'uncivilised' races of people, if you can call the Bushmen uncivilised. This is another thing I would like to find out, whether the surrounding environment has made the Bushmen more civilised or whether they have just ignored the white people and other African tribes and carried on with their old traditions. I find it interesting that there are still tribes like the Bushmen who survive in the desert without the help of the equipment and the machinery that white people would need. These tribes are becoming extinct very quickly and I think it is essential that either more research should be done into their culture and legends or something should be done to prevent pressure from the outside world changing their way of life before it is too late.

After this introduction, Lorna groups her information that she has collected about the Bushmen under the following two main headings: 'Location and Environment of the Kalahari Desert' and 'People – community and family life'; the latter is subdivided into more specific items: clothing, shelter, food and water, tools and weapons, jobs and trading, transport and communication.

She has drawn on a variety of resources in order to acquire her information. Her bibliography lists nine books or articles as well as 'Tapes, slides and a television programme by Lawrence van der Post'. She seems to enjoy presenting the information in her own words – her writing flows easily over twenty or so A4 pages before she arrives at her conclusions. It is accompanied by several careful pencil sketches and although it does not arrive at any startling rethinking of the Bushmen's position, the reader is left with the impression that through the process of reorganization and examination of her data, Lorna has learnt quite a lot about the Bushmen's way of life, affected as it is by conditions of extreme aridity. Her final comments are as follows:

> After writing this project I now see that the Bushmen's life is wrapped around the climate and conditions in which they live. Unlike us they have to use the raw materials around them. They use the materials to make their houses, their tools and their clothing.
>
> I think that it is fantastic to find people with a culture that we think of being dead with cavemen still alive today. The Bushmen's one ideal is to survive in the desert and they have found ingenious ways of finding and storing water. I don't think it is the Bushmen who are uncivilised, I think they have found themselves in a place and under such conditions that they have no option but to adapt themselves and they haven't changed since then. Sadly some Bushmen tribes have been coming into contact with white people and are coming under the white people's influence so they have changed and are not living in the traditional huts but in dwellings made from packing cases. I think efforts should be made to protect the Bushmen from outside pressure.
>
> The Bushmen have been affected a great deal by their climate, they live luxoriously during the wet season and have a wash when the water is in ample supply because during the dry season they don't wash because water is so scarce.
>
> I hope this project has put forward some of the reasons why this fine race of people should be protected.

Lorna has still not reached the stage where she can generalize about her findings sufficiently to formulate hypotheses, although several are implicit, both in her original questions and in her concluding paragraphs: that the Bushmen still live in a very primitive way because of the stringencies of their environment; that this way of life is in danger of being

corrupted by the influence of more 'advanced' communities; and that the entire tribe should be preserved just the way it is, rather like some rare species of wild life.

Put like this, each of these hypotheses can either be supported or challenged. Possibly that might be the next step that the teacher could suggest for Lorna to take.

Carol's question was: 'Is the pollution in Britain and throughout the world having a disastrous effect on mankind?' No doubt her own experience of some forms of pollution like car exhaust fumes and dirty, litter-choked canals led initially to her interest in the whole problem of what to do – along with items on television and in the newspapers, showing what are depressingly 'common' disasters nowadays, like shoals of dead fish or oil-drenched sea birds. In this sense, she had 'somewhere to put' the new information which she gained from the additional reading for her project. Again I quote her introduction and her conclusions – jumping over five chapters in-between which dealt with air, river and sea pollution and then with radiation. In each chapter Carol tried to answer the following questions:

1 What are the forms of pollution? e.g. gases, liquids etc.
2 How has man contributed to the pollution problems in question?
3 What is the effect of pollution on man?
4 What is the effect of pollution on wild life?
5 What is being done to bring the problem under control?

Where she falls short, understandably, is when it comes to speculating in any depth about possible solutions to these questions, but to see her project as incomplete is not to devalue it. The work that she has done here is valuable in at least two respects – it has filled out Carol's picture of how pollution affects our world and this in turn has reinforced her concern and her awareness of the need to do something. Carol finishes her project with her eyes on the future; perhaps more of our work in these years at school should seek to concern teenagers with the possible effects of present practice on the likely patterns and quality of life in years to come.

Introduction
Pollution means to make something foul, to contaminate something. Polluting the water means to throw something into the water to make it unusable. To make it a place where once fish could survive,

into a place where fish can only die. This project is about how man is unintentionally contaminating his environment. It also shows how some of the pollution is being brought under control and what measures are being taken to prevent it from eventually destroying everything.

Pollution, including radiation, has grown as a kind of side effect as the population and industrial productivity has grown. It is gradually increasing and damaging, sometimes beyond control, our environment. Before long as my project will show, the situation will become so bad that strong laws will have to be inforced as a kind of latter (?) protection for us all. Although the problem of pollution is bad, it is gradually being brought under control. If we, in the future are able to control it even more, then our future relatives might have a chance for a cleaner and decent environment.

There are many forms of pollution, water, sea, shore, air etc. The need for more research in these subjects is vitally important if man and the wild life is to be saved from disastrous damage. We must also make sure that this research is done quickly and the results of the research are quickly and efficiently applied.

Conclusion

It has been predicted that our planet has only a short time to live as a result of man's assault. The assault being a raid on the environment. Polluting the water, the sea, the air, the land. Only we can put something positive into controling this situation. And only by doing something positive about it can we put things right.

We spend a great deal of money on new assignments, things that although we might need, could have been left until a later date. That money then, could have been spent on new research for the help to counteract pollution. Large amounts of money have been spent on a control for radiation pollution, possibly because it is the most immediate danger to man and wild life. But in a few years time the other sources of pollution, the water, the land, and the air pollution will become equally dangerous. Only then will the authorities wish they had spent more money on projects and investigations.

Finding the money for maintaining wild life, nature reserves and for pursuing conservation projects of all kinds and preventing pollution is very difficult, but it must be found.

Water pollution is on the increase. The new firms that are being built produce waste, they pour it into the water in rivers then take

out more fresh water to carry on their business. This just can't go on. If we take something out then we must put it back. But not in the form of raw sewage or untreated refinery waste.

The car pollution problem is a must to be found. With car sales doubling every ten years, the exhaust gases emitted from them will become increasingly dangerous. As it is now, a person in contact with carbon monoxide fumes for five hours is likely to die. In Tokyo people are able to buy an amount of oxygen for about five new pence because carbon monoxide fumes are so bad that they produce serious possibilities of many deaths if someone stays in the city for too long.

The preservation of our environment is a world problem, and as U Thant, former Secretary General to the United Nations has said, 'if mankind does not find global solutions to global problems, it will perish, if not with a bang of a nuclear holocaust, then with the whimper of a species which ran out of air, water, resources and food'.

Perhaps U Thant forsees the future of our world. If he does, then for our sakes and for the generations to follow, we must put by the money we so urgently need for the projects to control pollution. If not, the forecast about our world may indeed come true.

For her first individual study, Susan chose to ask her question about the fairly recent past: 'Was the only reason Hitler retained the support of the German people from 1933–1939 his oppressive measures?'

Susan was one of the group I talked to about their project work and she explained that in the fourth year she had been interested in the work that the class had done together about the events leading up to the Second World War – sufficiently so to look forward to doing some more extensive reading herself. Her bibliography lists seven books concerned with this period.

It was Susan who made the point that having a question in mind *before* you started reading was a real help in sifting relevant information from irrelevant. Her opening comments reflect, I think, the confidence that having a question to answer gave her. It seems to be encouraging her to think about the facts instead of merely acquiring them like Belinda did in her piece on Nixon.

Introduction

It is not generally disputed that it was the support of the people of

Germany that put Hitler into power over them. However, a point sometimes disputed is whether he retained a sincere support from the year (1933) when he came into virtual power to the year war was declared by both France and Britain against Germany (1939). Or did he only hold the power because of ruthless and suppressive measures which he exercised over the German people with an intent of terrorising them into seeming to support him?

Many people chose, without thoroughly examining the evidence, the latter explanation. I think this must mainly be because it is so difficult to believe, knowing the outcome of this dictatorship – World War – still within the lifetime of many people; that a people aware of Hitler's intentions and fanaticism as the people of Germany must have been, could still have considered being a party to it.

Yet the evidence suggests to a contrary conclusion, that the majority of Germans maintained their staunch support. A question then, why did they do this? needs answering. I think the essence of the answer must lie in the fact that the whole country had a great many problems to which Hitler was offering a solution.

Thus Susan states her hypothesis and asks her questions. Over the next twenty pages of her study she carefully collects her data with these as a focus to help her make a selection, at the same time analysing the significance of her selection. This is how she sums up her conclusions:

If Hitler's oppressive measures did not significantly affect the retainment of the German people's support what were the reasons for it?

Why did they approve of his actions in banning trade unions etc. and otherwise taking their democratic rights away from them? In 'The Rise and Fall of the Third Reich' William I. Shirer writes: 'But the greatest cause of his acceptance of his role (the German Worker) in Nazi Germany was, without doubt at all, that he had a job again and the assurance that he would keep it.'

I think this is a very true statement and applies to more than just the working people of Germany. Nearly everyone believed they had materially gained something from supporting Hitler in 1936. Most of the people of Germany were then prepared, as they proberbly realised with Hitler they could not have both, to give up their political freedom for a job and wealth for the country.

The oppinion of the average German was proberbly at the time:

I was give by the Republic for the first time freedom . . . freedom to starve. Now I am offered either to vote for a Communist government, a job and income by a National Socialist government with a good leader who promises much wealth for Germany, or starvation, humiliation and poverty with the present government.

His choice was obvious. Yet why did they retain their support after they had given all this? Hitler had, from a supporters way of thinking, proved to them he could succeed at almost any goal they, or more precisely he chose. He was a strong political leader, the appeal of this is always a factor to take into account.

Now with a country of new roads, buildings, rising standards of living and respect from the rest of the world – the oppinion was simply 'Naziism must be right because it has given people all this. Perhaps I don't agree with all their ideas – I must be tolerant because where would I be if it weren't for Hitler?'

I believe what happened in Germany is not unique, it could happen again anywhere – it has happened before. Where a people are given a history similar to Germany's and any leader, they will give him a supreme right over them, it is in human nature. And I find as I explore this History I can understand how some of the German people felt that they were right to support him.

You may recall that the Dorcan teachers set down in their paper as 'a very basic aim' for their students 'the chance to make an objective assessment of the issues that face mankind today'. In one respect or another all three studies that we have quoted from show their writers attempting to resolve questions for themselves which have to do with such issues – how to ensure the survival of primitive cultures; what to do about pollution; and here in Susan's study a very thoughtful examination of the forces that persuade people to succumb to dictators. I believe her at the end of her study when she writes, 'I can understand how some of the German people felt . . .'. That seems to me to signal the achievement of an educational objective far more important and far-reaching than the 'passing' of an O-level examination.

Chapter 6: Changes in emphasis

I want to make clear at the start of this final chapter that it would be a mistake to assume that the kind of writing that we have just been looking at in the previous three chapters, is commonly found in most fourth- to fifth-year writing. It is much more likely that most of the 'essays' that students write will be very similar to Karen's writing in Chapter 1 and the examples that I gave in Chapter 3.

The writing produced on these two courses is often more connected or coherent, because it reflects a more active involvement on the part of the students in their own capacity to think – to sort out and interpret information so that they can take on more learning over a period of time.

I would like to check back now on why this seems to be the case for much of the writing that I have used in this pamphlet:

1 The teachers and initiators for each of these courses set out deliberately to encourage a more independent attitude on the part of the pupils in their fourth and fifth years at school to the work that they were going to do. They saw the key to this independence in the use, on the part of the pupils, of a wider range of thinking processes than those brought into play solely for the retrieval of information.
2 They acknowledged, therefore, that coursework and individual studies would be different in a very positive sense from the final examination papers: the pupils would be more directly involved in the *process* of learning – they would be allowed the time to take all the necessary steps that lead from information 'out there' either in the world in which the students found themselves, or in books and other resource materials, to understanding inside the 'knower's' own head.
3 They would give value to the initiatives that students had made, and the persistence that had been required in order to achieve the insights that reflect true learning of any permanent kind.
4 They would give status all the way along the line, to the nature of the enquiry process, by means of which understanding is reached.

For these reasons, learning from their own mistakes – as Linda did at the very end of her urban transect study, and as Lorna did from making a bad choice for her first study – was considered as a valuable part of the process. I am reminded of a comment that another student made, who had been following a similar course, that we quoted in our book, *Writing and Learning across the Curriculum 11–16*:

> This was the first big project I did and now when I look at it I marvel at how pathetic it is . . . I have placed emphasis on the wrong things and made all the mistakes I was warned about . . . so it ended up in my eyes a great failure. But I have learnt more from that project than any other piece of work I have ever done at school so it was only a failure in terms of what it was, not what was learnt from it.

In nearly every case, where students made use of the strategies suggested to them (which were very similar for each course), they were able to use their writing for a purpose – to try and solve the problems that they started with, by considering their data analytically and by attempting to reach conclusions based on the results of that thinking-writing-learning.

A caveat at this point, about the conclusions that students on both courses were expected to reach – I think this part of the 'structure strategy' is too complete and that we need a more explicit acknowledgment that conclusions might not be possible; that a neat and final ending is not necessarily an essential part of a genuine piece of research . . . If we think of Linda's work, for instance, on her urban transect, or Dawn's reflections about her visits to the hospital for mentally handicapped children or Lorna's study on the Bushmen of the Kalahari Desert or Carol's ponderings about pollution, there is no way in which any of them, honestly, could have reached any final conclusions. In my view, in cases like this it would be better to agree that the way ahead is uncertain than to insist on a theoretical 'rounding off' for the study.

One of the most significant shifts of emphasis that we must come back to in this chapter is the one which relates to the change of both teacher and pupil roles – a shift which again receives explicit acknowledgment from the teachers involved in both these courses. The pupil cannot experience a genuine sense of independence in conducting his own investigation *unless* the teacher is able to take up a relationship which is closer to 'partner in dialogue' than 'examiner'. Every other change that I have referred to so far is dependent on *this* change. In order to help the student *in the*

course of the learning that he is doing, the teacher must be able to analyse what is happening *through* the writing, so that he can suggest the next step. Once he has rejected the assumption that the whole group can be 'taught' some topic at the same time, or move forwards in learning at the same pace, he has to pay much greater attention to the individual needs and capacities of each pupil.

Philip Mitchell expressed this very clearly in the notes that he wrote for me, referred to briefly in Chapter 2:

> The ultimate choice of topic was the pupil's, but the teacher was on hand to give advice and the success or otherwise of a special study often depended on how carefully the topics were chosen. Many questions were difficult to control and it was therefore important that particular pupils were kept clear of such questions. Beyond a stated minimum, no particular importance was placed on length of projects and in advising particular children, therefore, teachers had to be sensitive to the particular abilities of the pupil concerned. The question chosen by a particular pupil had to be manageable for that pupil. Invariably at CSE level, this would mean that the project should be an answer to a specific question that was clearly limited in breadth. If sufficient care was taken in the choice of questions, most children were able to make genuine enquiries. Where a project failed, it was usually because either poor advice had been given on the choice of topic or good advice had been ignored by the pupil. There was (of course) a whole spectrum of questions that were suitable for pupils across the ability range. It wasn't a case of there being CSE-type project questions on the one hand and GCE-type on the other. Teachers had to know the strengths and weaknesses of individual pupils very well in order to give the necessary advice and have that advice respected. A fine line is of course apparent between strong advice and instruction. A pupil forced into studying a particular question would usually present a poor project.
>
> Unless care was taken in the choice of topic, certain children had to spend so much time in the gathering of information, that there was little time (or energy) left for the other tasks involved. On such occasions the job of selecting information was too much for these children and the study would tend to become a matter of simply transferring information from one place to another.

One final hypothesis of my own – the need to recognize that writing in the

early stages of learning will look very different from writing in the later stages. I mean writing that tries to be honest about the problems which are bound to crop up with some frequency at the commencement of any new excursion. 'Breaking fresh ground' is a common metaphor, but its implications are often passed over in school. It is my belief that 'first steps' put down onto paper would look very unsteady indeed, but this does not mean that they would therefore have to be disconnected from the writer's own thinking. On the contrary, the more disorganized they were allowed to be, the more chance they would have of reflecting the writer's preliminary thinking. They would probably be mostly questions, where the learner is endeavouring to locate and then define areas of confusion and uncertainty. They would certainly need to be highly 'expressive' in the sense that they would be totally in the writer's own voice, addressed to an audience that was well aware of the learning problems that were being encountered. The assumption would be, in effect, that the teacher could help the learner to find a way out of these initial struggles – if only they could be expressed in enough detail.

Both these courses came very close to acknowledging the need for writing that could look like this, but neither produced any. Perhaps we are still too dominated by the expectation that writing can only be used at a relatively late stage of the learning process. Possibly though, this could be a next step for teachers who believe in the value of this approach to learning – even in the examination years!

A final word about examinations, and the limitations of judging pupils' capabilities solely on their 'performance' on these occasions. As I write this, the examination results for this year have just 'come out' – with the usual crop of disappointments and results which are inexplicably 'bad' to teachers as well as to students. It seems illogical to me that any of us – teachers, pupils, parents, employers – should continue to regard Mode 1 results as though they were a complete, or even a substantial, reflection of a student's abilities and capabilities.

I want to end this pamphlet by suggesting very seriously indeed that any 'raising of standards' *must* be related to a more serious acknowledgment on the part of teachers and examiners (and, in the long run, the public at large) that work of the kind reflected in these two courses is as essential and desirable *in the examination years* as at any other point before or beyond them in our system of education.

What matters ultimately is the capacity our students discover in themselves to think about any of the areas of 'knowledge' that we give labels to on the timetable – in a way that enables them to perceive some meaning and significance in their studies which will remain with them long after their schooling is finished. Hopefully, if we have given them a good start, they will continue to ponder and reflect on the information and the ideas they started with in school for the rest of their lives. If they do, they might even move beyond our 'received knowledge', as it is currently represented in examinations, so that they do rather more than repeat the cycle which is all too familiar to us. That would be real learning, in a sense that we rarely achieve at present with more than a small minority – and that often fortuitously!

Bibliography

BRITTON, J. *et al* (1975) *The Development of Writing Abilities 11–18* Macmillan Education for the Schools Council

HICKMAN, G., REYNOLDS, J. and TOLLEY, H. (1973) *A New Professionalism for a Changing Geography* Schools Council (out of print)

MARTIN, N., D'ARCY, P., NEWTON, B. and PARKER, R. (1976) *Writing and Learning Across the Curriculum 11–16* Ward Lock Educational for the Schools Council

SCHOOLS COUNCIL (1976) (second edition) *Keeping Options Open* (Writing Across the Curriculum Project pamphlet) Ward Lock Educational for the Schools Council

UNIVERSITY OF CAMBRIDGE LOCAL EXAMINATIONS SYNDICATE GCE Ordinary Level, Schools Council Geography 14–18 Project (Subject No. 268)

Above all:

the Coursework and the Individual Studies of students at Dorcan and Withywood Comprehensive Schools.